



NRC NEWS

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801 Warrenville Road

Lisle IL 60532

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CONTACT: Jan Strasma (630) 829-9663

Viktoria Mitlyng (630) 829-9662

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E-mail: opa3@nrc.gov

DAVIS-BESSE SUMP PROBLEM PRELIMINARY SAFETY ASSESSMENT: "YELLOW"

The Nuclear Regulatory Commission has completed its review of the potential clogging of the containment sump at the Davis-Besse Nuclear Power Station and made the preliminary determination that it was a "yellow" finding, one of substantial importance to safety. The plant, operated by FirstEnergy Nuclear Operating Company at Oak Harbor, OH, has been shut down since February of last year.

The NRC found that there was improper coating material, fibrous material, and other debris in the reactor containment that could obstruct the flow of water into the containment sump in the unlikely event of an accident. To provide continued long-term cooling of the reactor following a loss-of-coolant accident, water would drain into the sump and be pumped back into the reactor. The buildup of debris on the screen for the reactor sump could restrict the flow of water for reactor cooling.

The NRC findings are contained in Inspection Report 2003-15, which was issued on July 30. It will be available on the NRC web site: <http://www.nrc.gov> -- select "Davis Besse" from the list of key topics. The inspection report will be on the Davis-Besse "News and Correspondence" page.

To correct the potential problem, FirstEnergy has installed a redesigned sump screen, providing substantially larger surface area, and, in addition, recoated surfaces in the containment with approved coatings and removed other sources of debris.

FirstEnergy may request a Regulatory Conference with the NRC staff to discuss the safety significance of the sump problems or it may submit its response in writing. The NRC staff will use any information submitted by the utility in making its final determination of the safety significance. The final safety significance will be posted on the NRC's Davis-Besse "News and Correspondence" page and at: <http://www.nrc.gov/what-we-do/regulatory/enforcement/current.html>

NRC inspection findings are evaluated using a four-level scale of safety significance, ranging from "green" for a finding of minor significance, through "white" and "yellow" to "red," for a finding of high safety significance. A yellow finding is one of substantial safety significance.

Normally, yellow findings can lead to additional NRC inspections and meetings with the utility. In the case of Davis-Besse, however, the plant is already subject to numerous inspections and an NRC oversight panel is monitoring the plant's activities in response to damage to the reactor vessel head which was found in March of last year.

The NRC inspection report discusses an additional issue, unrelated to the sump finding, concerning the high pressure injection pumps, which are part of the plant's emergency core cooling system. This issue involved potential damage to the pumps' bearings from debris in water pumped from the containment sump under certain accident conditions. FirstEnergy is currently modifying the pumps to correct this potential condition. The NRC staff is continuing its review of the high pressure injection pump issue to determine its safety significance.

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